

## ABSTRACT OF THE DISCLOSURE

A method for calculating a local mean number of tasks for each processing element ( $PE_r$ ) in a parallel processing system, wherein each processing element ( $PE_r$ ) has a local number of tasks associated therewith and wherein  $r$  represents the number for a selected processing element, the method comprising assigning a value ( $E_r$ ) to the each processing element ( $PE_r$ ), summing a total number of tasks present on the parallel processing system and the value ( $E_r$ ) for the each processing element ( $PE_r$ ), dividing the sum of the total number of tasks present on the parallel processing system and the value ( $E_r$ ) for the each processing element ( $PE_r$ ) by a total number of processing elements in the parallel processing system and truncating a fractional portion of the divided sum for the each processing element.